



Central Asia TB Control Partnership

Drug Management TA Visit to Turkmenistan

November 8-14, 2004

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Report date: December 30, 2004

EXECUTIVE SUMMARY

Purpose

This assignment was jointly carried out by Jim Bates and Natalia Cebotarenco of JSI and Movsar Makhmatov and Mavlyuda Mahmudeva of Project HOPE. This work benefited greatly from the constant support of the Project HOPE country team. Most important of all was the enthusiastic support of Dr. B.J. Jumayev, the Director of the National TB Center.

The general objective has been to assess the current state of TB drug management in Turkmenistan, with a main focus on drug management for the pilot DOTS sites. The SOW intended that to the extent possible, the assessment was to be comprehensive, that is, attempting to cover the following topics: logistics management information systems (LMIS), product selection, forecasting, procurement, inventory control procedures, warehousing and storage, transport and distribution, organizational support, product use, and financing. The intent was also that the findings and recommendations from this exercise would inform plans for upgrading drug management operations for both the current pilot activities and the DOTS expansion planned for the country.

Key Findings

Due to time constraints, it was not possible to cover all the topics called for in the SOW. However, the team believes that more than enough was learned to present useful findings and recommendations for next steps. Altogether, the Team came up with fourteen (14) findings, which are grouped under the main functions of the logistics cycle: product selection, procurement, logistics information management (LMIS) and distribution, and product use.

Among the 14 findings, three (3) stand out as highly significant, as follows:

- Anecdotally, informants reported that the provision of TB drugs for both DOTS and non-DOTS treatment was insufficient before the GDF began donating TB drugs. For non-DOTS areas, shortages still exist. Key treatment facilities report receiving far fewer drugs than they request. The recurrent drug cost of a national DOTS program is sure to exceed the MOHs current expenditures on TB drugs. Insufficient financing looms as a major challenge within Turkmenistan's DOTS program.
- At this point, there is no person within the National TB Program whose primary responsibility is the coordination of drug management. The Director is currently responsible for collecting all required information and has made it clear that he will share anything he actually has. However, it is very unlikely that in the future he would have the time to do the data recovery and tabulation that HOPE staff are now doing on MOH's behalf. Without a counterpart for the HOPE Drug Management Coordinator, the sustainability of this work is in question. The HOPE country team is well aware of this issue and is also working to engender MOH's agreement to the formation of a thematic working group for TB drug management, as well as a higher level country coordinating committee for TB.

- Drugs in Turkmenistan’s MOH system are distributed through a network of warehouses and SDP storerooms that varies from 2 to 4 tiers (levels). Both DOTS and non-DOTS TB drugs move through this system. For DOTS drugs, central storage takes place in a storeroom at the National TB Center. Non-DOTS drugs are stored at the Turkmen Farmatzia. Below the central tier there are Vilayat warehouses and hospitals, rayon drug stores and hospitals, and other service delivery points (SDPs). The distance between the Turkmen Farmatzia warehouse and the national TB hospital represents 2 tiers, between the central warehouse and the lowest level SDPs, 4 tiers.

The team gathered some information on how the Turkmen Farmatzia distribution system works, but generally it is fragmentary. There is some routine reporting of logistics information, at least between the Vilayat and the central office of Turkmen Farmatzia, however, it is not clear what the reporting and/or delivery cycles are through the levels of the system.

Long Term Vision

As readers will note later, most of the recommendations in this report relate to solving short-term problems. However, the time is not far off when all stakeholders will be asking themselves how to guarantee the availability of DOTS drugs into the future in a changing environment in which, at the very least, donors will play a reduced role in drug financing. It is important to view both the current commitment for GDF drugs, and the USAID Central Asia TB Control Project, as assets whose availability provide an opportunity to plan for the security of the DOTS drug supply for the future.

This “commodity security” can only exist when the MOH and NTP have the capacity to independently manage the following activities:

- Know at all times what quantities of different drugs are required now and for several (five) years into the future.
- Have the capacity to independently manage drug procurements, whether by donation or purchase.
- Have capacities for kitting, storage, and transport to ensure uninterrupted availability of drugs for clients at TB service delivery points.
- Have the capacity to locate and manage the financing required for procuring an adequate drug supply. Possible sources of financing include government budget funds, grants from donor agencies, development bank loans, and patients’ private sector purchases.

While it will take time to develop a credible commodity security strategy, the preparatory work needs to begin soon. Accordingly, many of the recommendations in this report are for short-term information-gathering activities that will contribute to building this strategy.

RECOMMENDATIONS

In the body of the report, readers will find the findings and corresponding recommendations grouped according to the functions of the logistics cycle. For purposes of providing a convenient overview of the drug management activities that lie ahead, the recommendations alone are listed below.

Product Selection

1. Collaborate closely with the WHO Liaison Office (LO) to ensure that all drugs in the DOTS protocol are included on the EDL and that all DOTS products, and especially HRZE, are registered.
2. Arrange for HOPE Regional Drug Coordinator for Tajikistan and Turkmenistan, Mavlyuda Mahmudeva, to participate in EDL revisions, representing DOTS interests; based on her work in Tajikistan, she has substantial experience in this area.

Procurement

3. Work with the WHO LO to assist the MOH in preparing, as soon as possible, the next GDF application. It is important to avoid a repeat request for an emergency shipment, and therefor...
4. Project HOPE and WHO need to work closely with the MOH to ensure that short-term expansion plans do not outstrip the existing supply.
5. Project HOPE needs to work with the MOH to help them better understand the expectations and requirements of donors/investors such as GDF. Examples include preparing applications, writing progress reports, formulating bid documents, and related activities. Project HOPE should also be prepared to extensively support them in these activities.
6. More data is needed on current expenditures for TB drugs in preparation for the development of alternative scenarios for drug costs for a national DOTS program. Cost data is also needed for anticipated non-DOTS treatment requirements. A comparison of the results of the two exercises will clarify future funding shortfalls.
7. Data is also needed on the types of TB drugs and their prices currently available in the retail sector.
8. When the Country Coordinating Committee is organized, the Project HOPE team needs to work to ensure that the issue of long-term TB drug commodity security becomes a priority topic within its mandate. The data gathered in points 6 and 7 above will be used to clarify for the Committee issues related to recurrent drug costs for DOTS. This will be a first step in working with the Committee to develop a long-term commodity security plan.

LMIS and Distribution

9. The DOTS program needs to develop an LMIS and distribution system design that is suitable for a nationwide program. In order to carry out that important task, much more information is needed regarding how both the Turkmen Farmatzia and DOTS pilot systems are organized, how they report, and how they recover data. Accordingly the country team should map out and document the operations of both the non-DOTS Turkmen Farmatzia distribution system and the pilot areas DOTS system. The mapping will cover such points as how stock is received, stored, accounted for, issued and/or dispensed at all levels of the systems. Details such as forms used, the periodicity of reporting and distribution, and personnel resources should be covered.
10. After this work is complete, the country team, with support from the HOPE Regional Office, the Drug Management Coordinator for Tajikistan and Turkmenistan, and JSI, should organize an “LMIS and Distribution Design Workshop” to present, discuss, and develop suitable designs for these program components.

Product Use

11. Mavlyuda Mahmudeva, the Regional Drug Specialist for Tajikistan and Turkmenistan, should make a trip to Turkmenistan as soon as possible to demonstrate how the Tajikistan kit system works. If the MOH reacts positively to the demonstration, MOH should be approached about ordering the next shipment of GDF drugs to be “kitted” by the supplier. If this step is taken, the Tajikistan country team, which has significant experience in this area, will be a good source of technical assistance.

INTRODUCTION

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Key Findings

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Among the 14 findings, three (3) stand out as highly significant, as follows:

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- At this point, there is no person within the National TB Program whose primary responsibility is the coordination of drug management. The Director is currently responsible for collecting all required information and has made it clear that he will share anything he actually has. However, it is very unlikely that in the future he would have the time to do the data recovery and tabulation that HOPE staff are now doing on MOH's behalf. Without a counterpart for the HOPE Drug Management Coordinator, the sustainability of this work is in question. The HOPE country team is well aware of this issue and is also working to engender MOH's agreement to the formation of a thematic working group for TB drug management, as well as a higher level country coordinating committee for TB.
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system. For DOTS drugs, central storage takes place in a storeroom at the National TB Center. Non-DOTS drugs are stored at the Turkmen Farmatzia. Below the central tier there are Vilayat warehouses and hospitals, rayon drug stores and hospitals, and other service delivery points (SDPs). The distance between the Turkmen Farmatzia warehouse and the national TB hospital represents 2 tiers, between the central warehouse and the lowest level SDPs, 4 tiers.

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As readers will note later, most of the recommendations in this report relate to solving short-term problems. However, the time is not far off when all stakeholders will be asking themselves how to guarantee the availability of DOTS drugs into the future in a changing environment in which, at the very least, donors will play a reduced role in drug financing. It is important to view both the current commitment for GDF drugs, and the USAID Central Asia TB Control Project, as assets whose availability provide an opportunity to plan for the security of the DOTS drug supply for the future.

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While it will take time to develop a credible commodity security strategy, the preparatory work needs to begin soon. Accordingly, many of the recommendations in this report are for short-term information-gathering activities that will contribute to building this strategy.

ASSESSMENT FINDINGS

The ten topics listed in the SOW could not be explored in equal detail. Therefore, for this report, we have grouped both the findings and recommendations under four of the major functions of the drug management cycle. They are product selection, procurement, logistics management information systems (LMIS) and distribution, and product use.

Product Selection

Findings

1. Turkmenistan has drafted a National TB Control Program that specifies drug use protocols for DOTS. The Ministry of Health (MOH) has approved the program, although the Government has not yet done so. The MOH is, however, currently acting as if these protocols have already been approved. The TB Program recently obtained the following products from GDF for DOTS: HRZE 75/150/400/275, HR 75/150 mg, HR 150/150 mg, Z 400 mg, E 400 mg and S 75 mg. At this point, all of these products are available in full supply.
2. The National Essential Drug List (EDL) contains 5 anti-TB products, that is: H, R, Z, E and S. Review of this shortlist shows that these product are listed only in mono-component form; there are neither HRZE nor HR. There are 13 TB products registered for use in Turkmenistan, including 1 FDC, that is, RZ. Our review showed that of the 6 DOTS products, only E 400 is currently registered.¹
3. This means that some DOTS products are not listed in key product selection documents and thus raises questions about the long-term sustainability of pro-DOTS selection decisions. It was also noted that the EDL is not in the WHO-approved format. (According to the WHO Liaison Office, an updated and revised EDL is planned for completion by May 2005. It is not yet clear what changes in nomenclature and organization will take place.)

Procurement

Findings

4. Most drugs used in the MOH system are procured by Turkmen Farmatzia, a purchasing and distribution operation that is descended from the old Soviet-era Republican Farmatzia. Given the sensitivity that surrounds procurement operations in most countries, and cautious receptions for short-term consultants, the Team decided not to focus on this aspect of procurement. For the same reason, neither did the Team focus on the operations of the local producer Ajanta, even though it does produce TB drugs. It is known, however, from the February 2004 GDF Monitoring Report, that prior to the recent arrival of a GDF emergency shipment, pre-existing financing, procurement, distribution operations were unable to maintain full supplies of DOTS drugs for the pilot sites. The GDF February 2004 Country Visit Report alluded to stockouts of Z and S.
5. In late 2003, the MOH requested from GDF funding for 3 years worth of drugs. GDF agreed to provide for 1 year, with an arrangement whereby MOH could reapply for the subsequent two years. In April 2004, MOH submitted an application for drugs sufficient to cover shortfalls for 2004-2005. This supply was estimated as sufficient for 3,632 cases, according to the application.

The total order was divided into two shipments, with 20% being sent on an emergency basis and the other 80% to follow. The emergency shipment arrived in September 2004 and now all pilot sites have full supplies of DOTS drugs. As of November 14, the 80% second shipment was in country but still in customs.

¹ All 5 drugs are present, but, except for E 400, not in the strengths or combinations represented in the GDF procurement.

HOPE staff have stated that, taking into account both shipments, the drugs now on hand will last for about one year. This means that fresh stocks must be available for use in January 2006.

6. Assumptions about where the recently arrived GDF drugs will be used are changing. For example, it was originally envisioned that all of Mary Vilayat with its population of 1,300,000 would be covered. Now it appears that only the city of Mary will be covered, that is 300,000 and that the balance intended for this Vilayat is to be used elsewhere. At the time of the Assessment team's visit, the "elsewhere" was unknown. Subsequently, the National TB Program and HOPE staff have worked to develop a distribution plan for 2005, and this issue has been clarified. The ability of the overall MOH/HOPE team to accomplish this important task so quickly reflects very positively on all concerned. This plan is appended to this report as Annex One.
7. Concern has been raised within both the HOPE Team and the WHO Liaison Office about the fact that the MOH is somewhat inexperienced in dealing with donors. In the future, efforts will need to be made to strengthen the MOH for purposes of preparing grant applications and fulfilling donor reporting requirements.
8. All stakeholders should be concerned about how drugs will be procured after the GDF grants have run their course. Anecdotally, informants report that the provision of TB drugs for both DOTS and non-DOTs treatment was insufficient before GDF. For non-DOTS, shortages still exist. Key treatment facilities report receiving far fewer drugs than they request. The recurrent drug costs of a national DOTS program is sure to exceed the MOHs current expenditures on TB drugs. Insufficient financing looms in the DOTS program's future. Now, while the country has GDF support, there is a need to make estimates of long-term costs and share them with MOH. This will be the first step in the process for making the DOTS drug supply financially sustainable.
9. Although TB drugs are available in the drug retail sector, data have not been gathered on the specific products being sold and their prices.

LMIS and Distribution

Findings

10. At this point, there is no person within the National TB Program whose primary responsibility is the coordination of drug management. The Director is currently responsible for collecting all required information and has made it clear that he will share anything he actually has. However, it is very unlikely that in the future he would have the time to do the data recovery and tabulation that HOPE staff are now doing on MOH's behalf. Without a counterpart for the HOPE Drug Management Coordinator, the sustainability of this work is in question. The HOPE country team is well aware of this issue and is also working to engender MOH's agreement to the formation of a thematic working group for TB drug management, as well as a higher level country coordinating committee for TB.
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12. Because the DOTS pilots are for the most part located in urban areas, rayon level storage is not required. So at this point, one can say the DOTS logistics system has 3 tiers (levels). They are the central storeroom at the National TB Center, the Vilayat TB hospitals, and the nearby polyclinics (SDPs). The distribution system is based on a “push” principal in which the Vilayat hospitals use the number of expected cases, by category, plus balances in the hospital storerooms, to estimate quarterly requirements. Subsequently, drugs are pushed out to dispensaries and polyclinics, based on newly registered patients.
13. Although Project HOPE monitors personally collect information on stock balances and consumption, at least at Vilayat levels, there is no system in place for reporting this information upward. Distribution between the Vilayat TB hospitals and polyclinics is based on the TB 1 form, with deliveries at this level being monthly. Thus, when a patient completes the intensive phase and is assigned to a polyclinic for the continuation phase, the entire course of treatment is not transferred with him; rather, it is transferred one month at a time. Stock accounting at all storage and dispensing sites visited appeared to be up-to-date and complete. However, in Mary, the one pilot site we were able to visit, it did not appear that SDPs were regularly reporting stock levels and consumption. In this small setting, communications are based on personal communication via phone calls. While it appeared to work well in this limited setting, overall this is not a good model for the LMIS for an expanding program that aims to achieve national coverage.

Product Use

Findings

14. Currently drugs for the DOTS program are shipped loose packed from the central level to Vilayat hospitals and again from Vilayat hospitals to PHC SDPs. In Mary, we observed that at two out of three PHC dispensing sites, staff had improvised patient-specific kits. The kits are useful tools for assuring that every patient has drugs for his or her complete course of therapy for both the intensive and continuation phases. Advocates also believe that they help reduce the chance for dispensing errors. The chief of the Mary TB hospital indicated that he was very receptive to the idea of using kits. Kits for both phases are already standard practice in Tajikistan, whereas in Turkmenistan, about 35% of the population have access to DOTS. Tajikistan initially packed its kits in-country and has ordered its next shipment of drugs from GDF to be kitted by the supplier.

RECOMMENDATIONS

Product Selection

Recommendations

1. Collaborate closely with the WHO Liaison Office (LO) to ensure that all drugs in the DOTS protocol are included on the EDL and that all DOTS products, and especially HRZE, are registered.
2. Arrange for HOPE Regional Drug Coordinator for Tajikistan and Turkmenistan, Mavlyuda Mahmudova, to participate in EDL revisions, representing DOTS interests; based on her work in Tajikistan, she has substantial experience in this area.

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LMIS and Distribution

Recommendations

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NEAR FUTURE DRUG MANAGEMENT ACTIVITIES

The JSI Assessment Team members spent time with the Project HOPE Country Team discussing how to integrate drug management activities into existing work plans. Following the departure of the Assessment Team, the Country Team developed a “short term” drug management work plan, consisting for the most part of data collection activities to inform a future LMIS and distribution design activity on an as yet unspecified date in the Project’s second year. This short-term work plan is appended as Annex 2.

ANNEX ONE

DISTRIBUTION OF THE SECOND PART OF GDF DRUGS FOR THE YEAR 2005

#	Drug Name and Strength (mg)	Received quantaty	Expiration Date	National Cener for TB Prevention (657 patients)	Mary Vilayat TB Hospital (110 patients)	Turkmenbashy TB Hospital (89 patients)	Dashoguz Vilayat TB Hospital (832 patients)	Sum	Remain
1	Rifampicine 150 mg/Isoniazid 75 mg/Pirazinamid 400 mg/Ethambutol 275 mg	865 boxes (in 1 box 672 tablets)	05.2007	255 boxes (171360 tablets)	43 boxes (28896 tablets)	35 boxes (23520 tablets)	322 boxes (216384 tablets)	655 boxes (440160 tablets)	210 boxes (141120 tablets)
2	Rifampicine 150 mg/Isoniazid 150 mg	715 boxes (in 1 box 672 tablets)	05.2007	216 boxes (145152 tablets)	37 boxes (24864 tablets)	29 boxes (19488 tablets)	274 boxes (184128 tablets)	556 boxes (373632 tablets)	159 boxes (106848 tablets)
3	Ethambutol 400 mg	120 boxes (in 1 box 672 tablets)	04.2009	39 boxes (26208 tablets)	7 boxes (4704 tablets)	6 boxes (4032 tablets)	49 boxes(32928 tablets)	101 boxes (67872 tablets)	19 boxes (12768 tablets)
4	Streptomycin 1.0	370 boxes (in 1 box 50 vials)	01.2007	79 boxes (3950 vials)	13 boxes (650 vials)	11 boxes(550 vials)	100 boxes (5000 vials)	203 boxes (10150 vials)	167 boxes (8350 vials)
5	Sanjim üçin suw 5 ml	185 box (1 box 100 vials)	11.2008	39.5 boxes (3950 vials)	6.5 boxes (650 vials)	5.5 boxes (550 vials)	50 boxes (5000 vials)	101.5 boxes (10150 vials)	83.5 boxes (8350 vials)

Director of the national center for TB prevention

Jumayev B.J.

ANNEX TWO

WORK PLAN FOR DRUG MANAGEMENT TEAM FOR THE PERIOD FROM NOVEMBER 2004 TO APRIL 2005 (6 MONTHS)

Project	Project months						Persons responsible
	Nov.	Dec.	Jan.	Feb.	March	April	
Collect a primary documents (invoices)							DMC
Collect all secondary documents related to drug management in Turkmenistan							DMC
Make a catalog of records keeping practiced in DOTS pilot sites							DMC
Determine annual needs of TB drugs for pilot regions							DMC, NCTBP, MOH
Assist in preparation of the next GDF application							DMC, NCTBP, MOH
Clarify with MOH expansion plans and develop the estimates of how long current stocks will last							DMC,PH,NCTBP,MOH
Support extensively the MOH in dealing with global funds							PH,WHO,NCTBP,MOH
Map out and document the operations of both none DOTS and pilot areas -DOTS distribution system including how stock is received, stored, accounted for, issued and/or dispensed at all levels of the systems as well as forms used, the periodicity of reporting and distribution and personal resources.							DMC
Learn thoroughly the workings of the Turkmen Pharmacia LMIS and distribution system							DMC
Collect data on price of TB drugs available at the retail sector							DMC
Collect data on current expenditure for TB drugs and develop scenarios for drug costs for a national DOTS program (plus anticipated non DOTS treatment)							DMC,MOH
Collaborate closely with WHO LO to assure that all drugs in the DOTS protocol are included on the EDL							PH,NCTBP,MOH,WHO LO
Ensure that all DOTS products become registered							PH,NCTBP,MOH,WHO LO
Work on implementation of a kit system							PH, NCTBP,MOH

DMC-drug management coordinator; PH-Project HOPE; MOH- Ministry of Health; NCTBP- National center for TB prevention; WHO LO - World Health Organization Liaison Officer

SOURCES CONSULTED

Anthony Savelli, Rational Pharmaceutical Management Plus Program Initial Visits to Turkmenistan and Uzbekistan, MSH, 2002.

Movsar Makhmatov, Drug Supply System in Turkmenistan [and] Drug Availability Study in Ashgbad Pilot Site, Project Hope, 2002.

Marina Safarian and others, Turkmenistan GDF Country Visit Report, WHO, 2004.

Ministry of Health, Turkmenistan National TB Program, Government of Turkmenistan, unpublished.

Project Hope, Final Assessment and Evaluation Report, Tuberculosis Program Implementation in the Central Asian Republics, Project Hope, 2004.

LIST OF CONTACTS & MEETINGS - TURKMENISTAN DRUG MANAGEMENT & LOGISTICS ASSESSMENT

#	Places Visited	Contacts	Titles	Contact Numbers
1	Office of Project HOPE (PH) Turkmenistan	PH staff: Batyr Kochumov Sona Rozyyeva Batyr Tchapau Irina Shelokova	Program manager Drug management specialist Monitoring and evaluation specialist TB specialist	993 12 34 45 43 993 12 34 45 47 993 12 34 45 32
2	Ministry of Health and Medical Industry of Turkmenistan (MHMIT)	Guljermal Ezizova	Head of treatment and preventive aid department of MHMIT	993 12 35 51 03
3	National Center for TB prevention (NCTP)	Babakuli Djumayev Shihmurad Hokgushev Ester Akmamedova Gulshat Rozybayeva	Director of the NCTP Head of outpatient department of the NCTP Head pharmacist of the NCTP Nurse-dispenser at the outpatient department of the NCTP	993 12 34 18 86 993 12 34 40 18 993 12 34 08 82 993 12 34 40 18
4	WHO office in Turkmenistan	Bagtygul Karriyeva	WHO liaison officer	993 12 39 19 33
5	USAID Turkmenistan Meeting took place at the office of Project HOPE	Elena Samarkina	Health program manager, USAID Turkmenistan	993 12 45 61 30
6	Mary welayat (region) Health department	Annageldy Gaipov	Head of Mary welayat health department	993 522 3 23 92
7	Mary welayat TB hospital	Geldimurad Muhamedorazov Irina Urmanova	Director of the Mary welayat TB hospital Head-nurse of the Mary welayat TB hospital	993 522 5 75 72 993 522 5 68 47
8	Outpatient department of the Mary welayat TB hospital	Maryam Erkeshtliyeva Nurse-dispenser	Head of outpatient department of the Mary welayat TB hospital Nurse-dispenser	993 522 3 23 45 993 522 3 23 45
9	Health House #1 of Mary city (Primary health care facility)	Jemilya Movlyamova Maysa Klycheva	Director of the Health House #1 Nurse-dispenser at the DOTS room of Health House #1 of Mary city	993 522 3 52 03 993 522 3 52 03
10	Health House #2 of Mary city	Kakamurad Reimov Aygozel	Deputy director of the Health House #2 of Mary city Nurse-dispenser at the DOTS room of Health House #2 of Mary city	993 522 3 47 27 993 522 3 47 27

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